Optics Quiz 2 Review

Key Terms:   
refraction refracted ray angle of refraction index of refraction  
partial reflection and refraction critical angle total internal reflection  
rainbow apparent depth shimmering mirage  
Temperature Inversion

Apart from the key terms above, you should know the following from chapter 11

From Chapter 11.1

* know what refraction is
* know how the speed of light in a medium causes it to bend (including which way it bends)
* know Fermat's Principle
* know how to use the index of refraction

From Chapter 11.2

* know what is different about light going from a slow medium to a fast medium
* know how to describe total internal reflection and when it occurs
* know the uses discussed in this section about internal reflection

From Chapter 11.3

* know how a rainbow is produced (be able to draw the diagram)
* know how apparent depth influences what we see
* know how changes in the temperature of water results in shimmering, mirages and temperature inversions

Equations:

index of refraction:  
  
 c = 3.0 x 108 m/s

Recommended Questions:  
pg 482- 483 # 1, 3-6, 8, 9, 11, 12, 16-19, 23, 25